

Electoral Snakes and Ladders

Anyone who has played snakes and ladders knows that, just before the winning square, there is always a big bad snake's head, to take the would be winner right back to square one.

The ALP 1998 almost-victory is a classic tale of electoral snakes and ladders.

Labor candidates won 51.4 percent of the combined national vote, after preferences.

Using the cube rule, or the swing pendulum, which links the national vote with the number of seats won (after a uniform national swing), Labor candidates should have won about 80 seats, leaving John Howard with only 68.

Well comrades, we got the votes, and moved cheerfully up along the cube rule line, or the swing pendulum, right to the 80 seat mark, only to find the Coalition had got there before us, and moved the cube rule line vertically up by more than two percent. This big bad snake in the form of a new cube rule curve took Kim Beazley on a roller coaster back down to what looks like 66 seats.

According to the swing pendulum, the ALP needed a swing of about four percent of the vote, after preferences, to win a majority of the seats. Labor actually obtained a swing of 5.1 percent, after preferences, and yet still needs another 0.8 percent to win a majority of the seats. Anyone silly enough to still take notice of the pendulum device to predict the outcome in the House of Representatives should not be gainfully employed by any major party.

So, how does a party win a majority of preferred votes but not a majority of the seats?

The answer to the riddle is at once simple and complex.

The outcome of the seats contest in the House of Representatives is not a simple function of the size of the national percentage of the votes won by the major parties, it's also a function of where the votes are won, or the distribution of swings.

The Labor Party's biggest swings were concentrated in its safest seats. Its second biggest swings were in the safest Coalition seats, the third biggest swings were in Labor's marginal seats. The lowest swings of the lot were obtained in the marginal Coalition seats Labor needed to win to form a Government.

While the national swing and the average swing to Labor were around five percent, the range or distribution of swings was closer to 18 percent. When these swings are

evenly distributed across all seats, the cube rule and the swing pendulum hold true. When, as in 1998, the swings are disproportionately located in safe seats, the cube rule curve moves down, according to success or otherwise of the major parties' marginal seat campaigns.

In slightly-more technical terms, the ratio of seats won is a function of the ratio of the cube of the votes won, PLUS a constant determined by the success of the major parties' campaign directors in targeting their marginal seats.

When we consider the current cube rule, as shown in Figure 1, from a Coalition viewpoint, we can see that the ideal curve actually moved vertically upwards on election night by about two percent. This movement was a function of the success of the Coalition campaign in winning its votes in its most marginal seats.

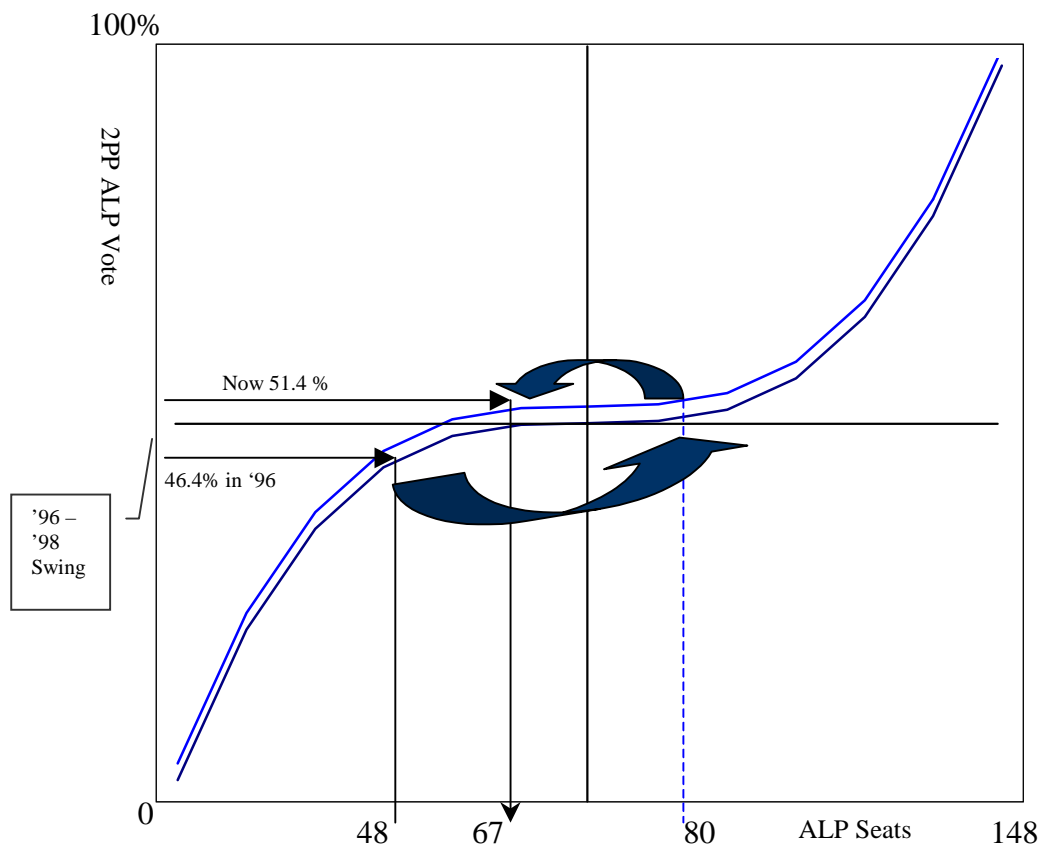


Fig 1

Figure 1 shows the mechanics of what happened on election night.

Labor started out with its 1996 result of 46.4 percent of the preferred vote and 48 seats. It moved up the idealised cube rule curve (the actual curve looks a little different, but the complexity of the calculations are beyond the scope of this little paper) to a position where it 'won' 80 seats. However, the new, higher, cube rule curve was already in effect, and the Labor Party then slipped back down this new curve to the 66-seat mark.

If you want a fair system, where the Executive arm of Government represents a majority of voters, you have to directly elect the Prime Minister, or use proportional

representation to elect the House of Representatives. We'll leave this discussion to another time and place.

What we have attempted to do here is explain a little about the mechanics of how this disproportionate result came about, given the constraints of Australia's single-member constituency system.

What then were the campaign and demographic dynamics behind these mechanics?

The analysis takes all the preliminary 1998 ALP votes and 1996 to 1998 swings, and correlates these with relevant electorate-based demographic data (such as age, income occupation, etc) from the 1996 Census.

These correlations were then used in a standard statistical regression program to calculate computer projections of ALP preferred votes and swings. By comparing the computer projection with the actual vote and swing, we were able to grade ALP performances across seats.

The key demographic variables were then examined across the different categories of seats: safe Coalition, marginal Coalition, marginal Labor and safe Labor. This shows how the major parties won more seats than their share of the vote would predict.

This sort of analysis was pioneered in Australia by then politics lecturers Dean Jaensch and Dr Neal Blewett, and refined by Adelaide Statistician John Lockwood. It has been used by the current authors to examine every Australian election since 1966.

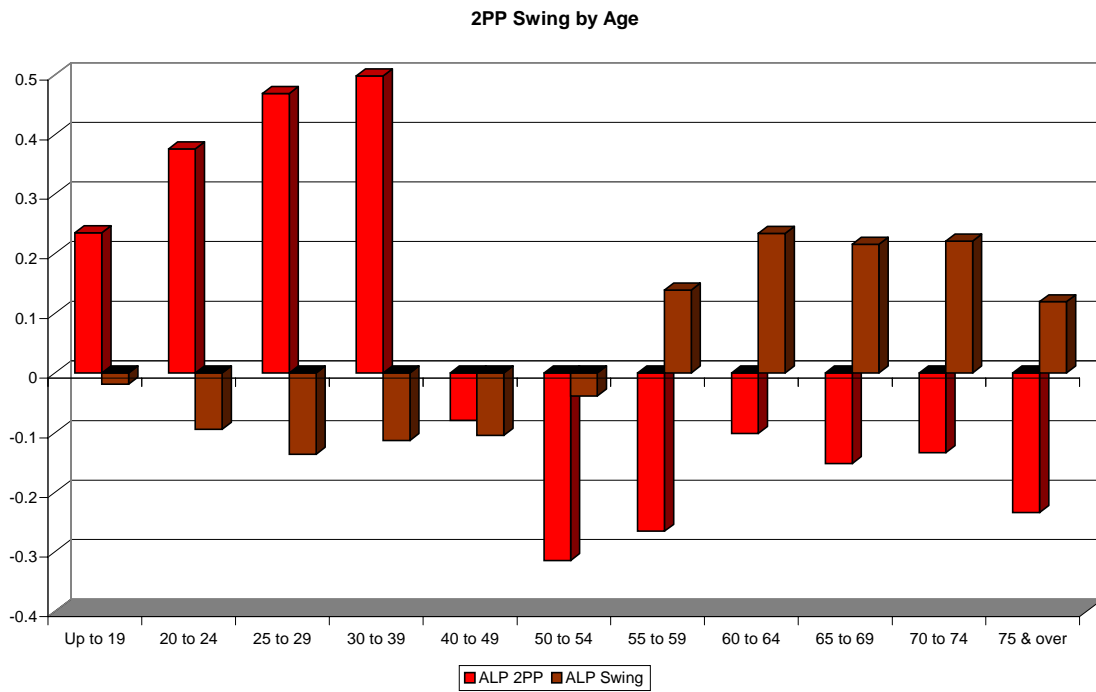


Fig 2

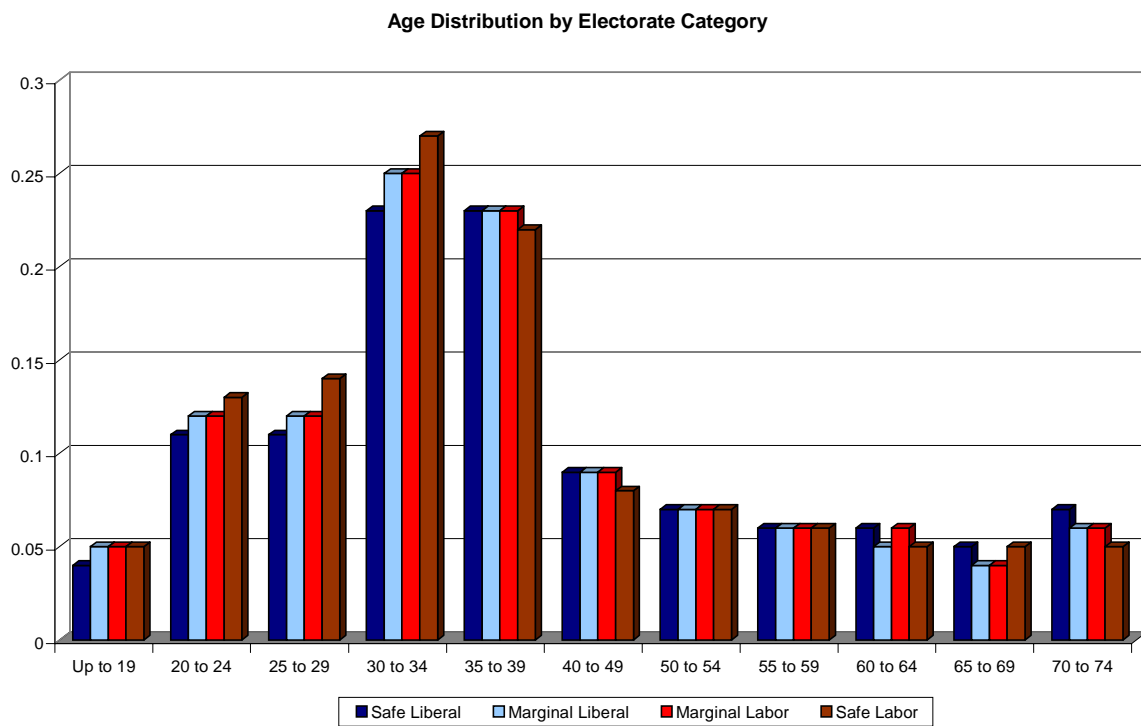


Fig 3

ALP - 2PP & Swing by Occup. (Male)

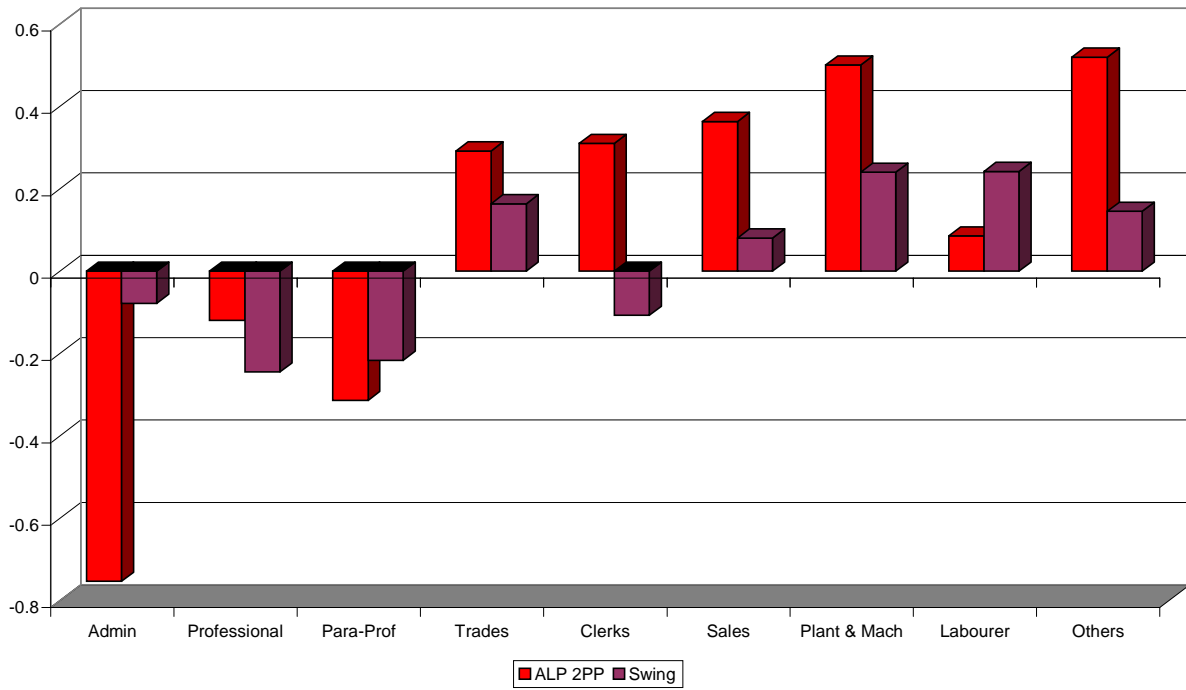


Fig 4

Distribution of Male Occupations by Category of Seat

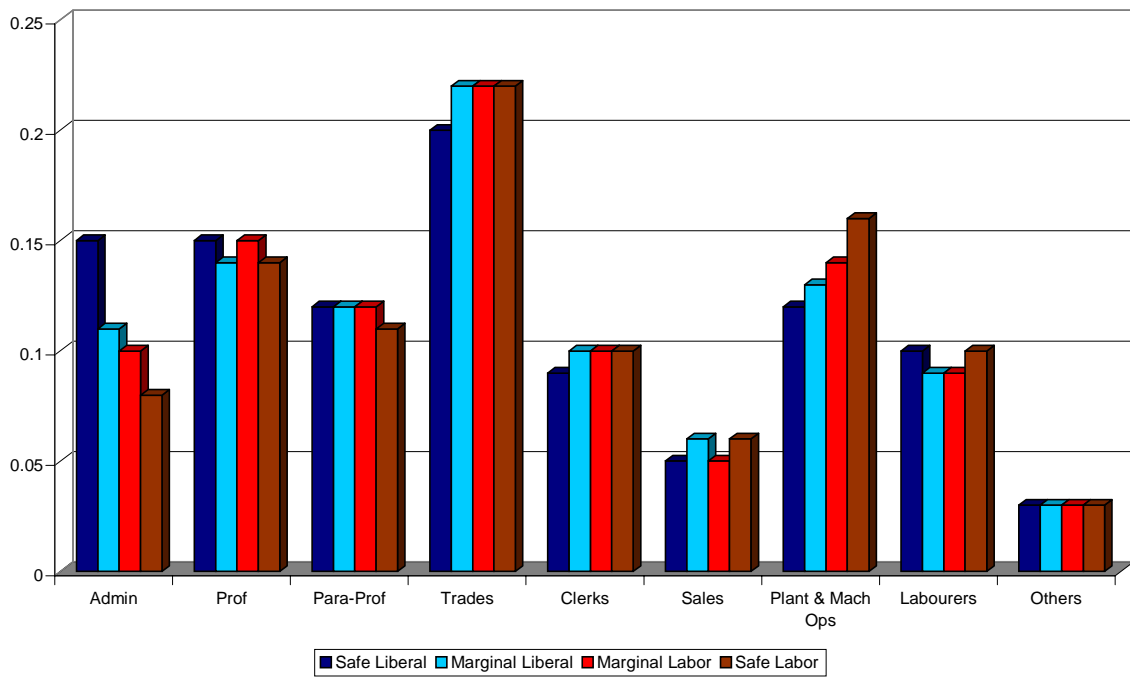


Fig 5

ALP - 2PP & Swing by Income (Male)

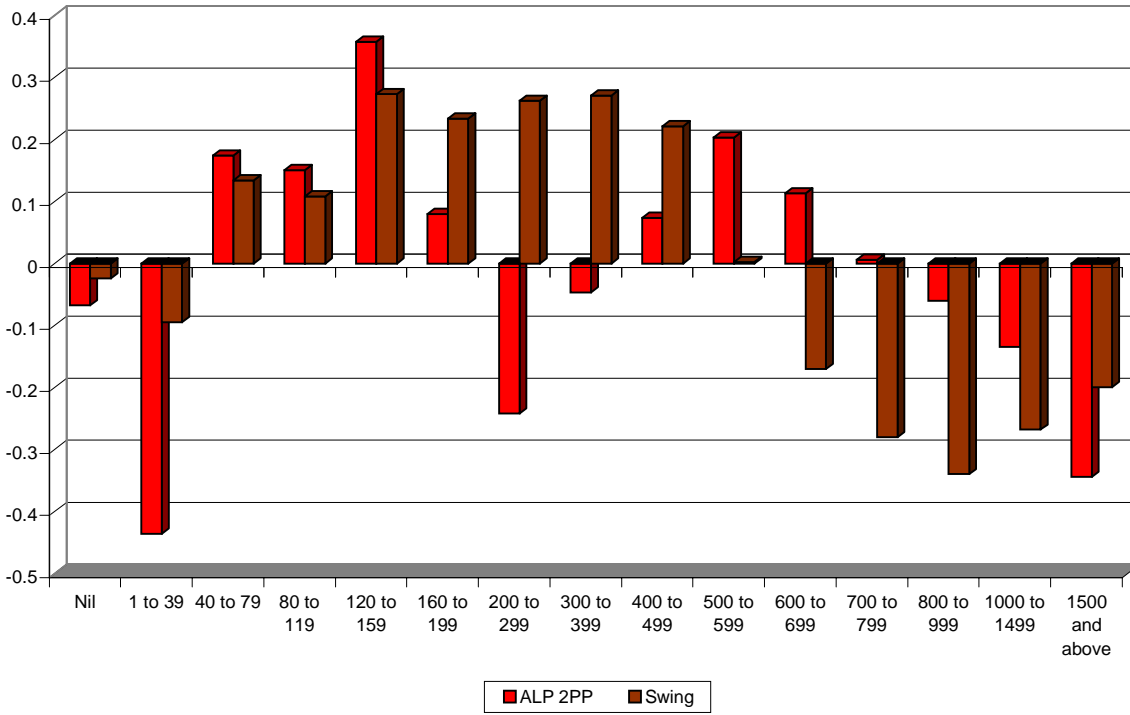


Fig 6

Distribution of Incomes (M) by Category of Electorate

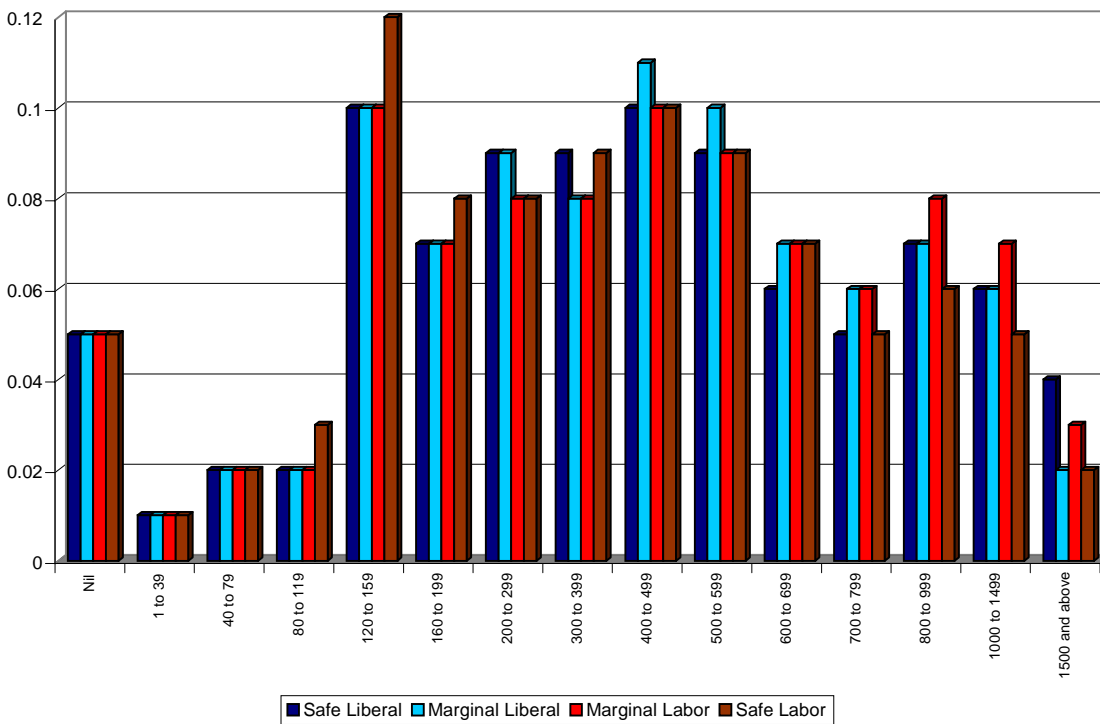


Fig 7

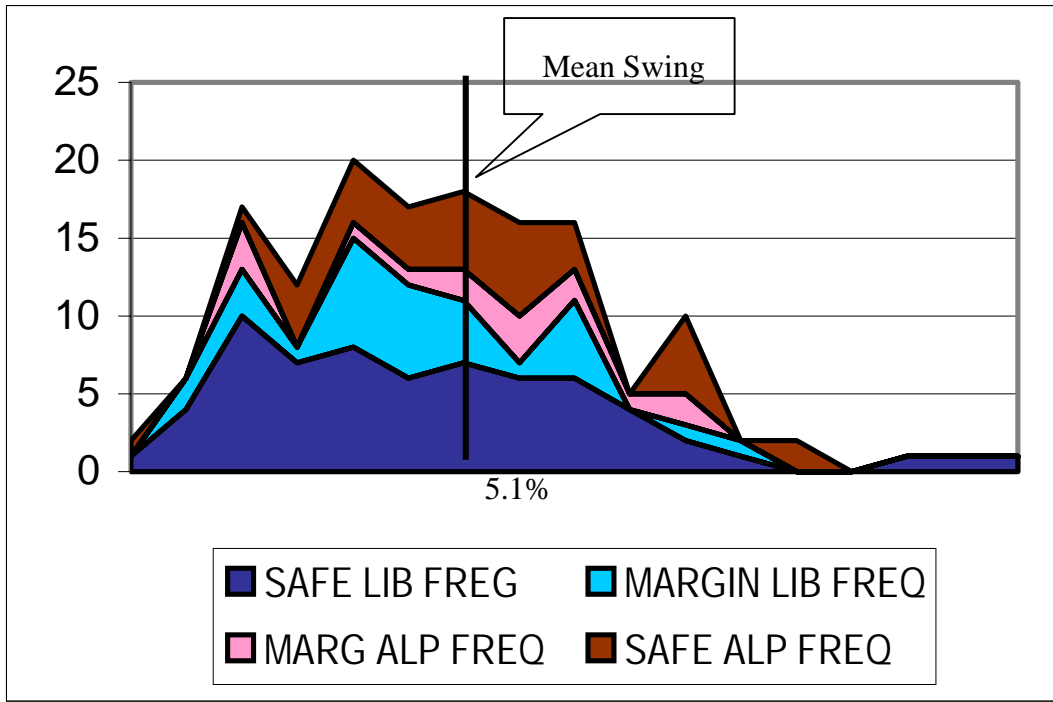


Fig 8

Tax Package Beneficiaries by Income (Single Income Family with Two Dependants)

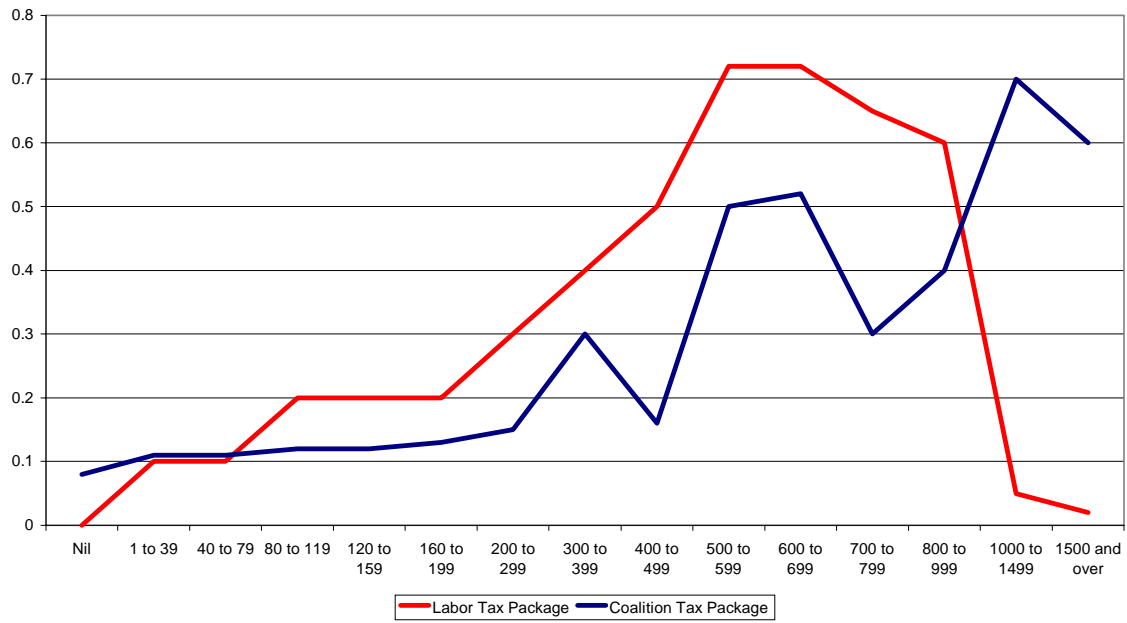


Fig 9

Figure 2 shows, in red, the ALP support in 1996 across age groups and the 1996 to 1998 swing across the same age groups, shown in brown.

The figure shows the ALP received an increasing level of support (with increasing correlations marked by higher red bars) from the 18 years up to 39 years age groups.

This support dropped to a statistically-insignificant level for the 40 to 49 age group, and then fell to a strongly negative level of support for Labor, or a strong level of support for the Coalition, for those groups aged 50 and above, with some fluctuations up to 75 years and over.

In the 1998 election, the swings for the same age groups showed Labor lost support among its more idealistic younger Keating supporters, aged up to 39 years. Labor failed to gain support from the 40 to 54 year age group. Labor however, gained positive swings amongst the traditionally anti-Labor 55 plus age groups.

Figure 3 shows the break-down of the distribution of age groups in Figure 2. The safe Liberal seats are those Coalition seats held by a margin of 5 percent or more of the preferred vote in 1996, marginal Liberal seats were those Labor had to win, with a margin of up to 5 percent in 1996, marginal Labor seats were those in 1996 in which Labor candidates polled up to 55 percent of the preferred vote (some of which were under realistic challenge from the Coalition) while the safe Labor seats were those in which Labor won more than 55 percent of the preferred vote in 1996.

The figure shows that the 30 to 34 years age group was disproportionately located in safe Labor seats, while the 70 to 74 age group was disproportionately located in safe Coalition seats. To a large extent, these ratios are a statistical derivation of Figure 2.

Together, Figures 1 and 2 show that, as far as age is a factor, Labor gained support in safe Liberal seats. Conversely, Labor did not gain support amongst age groups concentrated in marginal Liberal seats.

Figure 4 shows Labor's gains and losses across occupation groups. Of note is the fact that Labor lost support amongst administration workers, professional and para-professionals which are the higher income groups that swung to Labor in the recent Queensland State Election as a reaction to the Liberal's decision to allocate preferences to One Nation. The figure also shows that Labor made some gains amongst trade workers who remain Labor's strongest historical support base, and unskilled plant and machinery operators and labourers.

However, Labor suffered negative swings amongst clerical workers and gained only marginal swings amongst sales workers.

Figure 5 shows that the Liberal heartland amongst managers and administrative workers were unaffected by swings elsewhere and stayed with their historic party of choice. Labor's loss of support amongst professional and para-professionals occurred in marginal Labor seats. Labor failed to gain support in the marginal groups of clerks and sales, but regained support amongst plant and machinery operators and labourers who are disproportionately located in safe Labor seats.

The income figures used in figures 6 and 7 are based on what Australians told the Census collectors on Census night in 1996. Respondents to the Census are asked to give gross (before tax) income, but they often don't. Invariably, the non pay-as-you-earn taxpayers, especially self-employed farmers and small business persons, give their taxable income (after paying for business expenses most wage and salary earners are unable to claim). This taxable income figure can be pretty small, even for some extremely asset-rich persons, traveling the world in their company aircraft.

Also, the PAYE taxpayers tend to give their weekly take-home pay figures, which, of course, exclude tax. Even welfare recipients forget to mention income from part-time employment or investments, and understate their gross income on the Census form.

Figure 9, on the other hand, is based on comparatively real gross incomes, as disclosed in group certificates, bank statements and tax returns. Voters are smart enough to know this when they make up their mind how they're going to vote. They are, after all, the ones filling out the forms, as well as the ballot papers.

In addition, the 1996 Census is also two years old, so wages have crept up a little. (Voters would also weigh up the tax packages from the major parties, based on wage outcomes they would like to get during the life of the next Government, so they would evaluate the package based on their average estimated earnings over the following three years).

This means that for figures 6 and 7, you can move the income scale to the left, by about 25 to 30 percent so that the anti-Labor swing among the upper income groups in figure 6, nestles pretty comfortably under the line charting the drop in benefits for these voters in Labor's election tax package. People did not vote Labor, despite their predispositions, if they thought it was going to cost them money. In 1998, John Howard was the Home Brand of electoral washing powder, with the rationale being, if you've got to buy it, and they all do basically the same thing; why not buy the plain one that costs the least?

So a person earning a stated income of \$600 to \$699 in figures 6 and 7 was probably grossing a real income close to or in the \$800 to \$999 range, accurately shown in figure 9. This group voted Labor in 1996, swung strongly against Labor in 1998, and, as shown in figure 7, lived in a marginal Coalition, marginal Labor, or safe Labor seat. Under Labor's tax rebate package, this group lost out, compared to the adjacent lower income groups, as you can see from the \$800 to \$999 group in figure 9.

However, the biggest losers under the Labor proposed tax credit package, compared to the Coalition's proposed tax cuts, were those voters shown in figure 9, earning more than \$1000 a week, who would tend to be found in the (stated) \$700 to \$799 range of figures 6 and 7. This group was politically neutral in 1996, swung strongly against Labor in 1998, and lived in marginal Liberal and marginal Labor seats. If you want to win an election, this is the group you reward, as the Coalition discovered.

The moral of the tax-vote story is that Labor was several income groups short of the mark. Drawing the line at \$50,000 per year excluded significant numbers of swinging

voters in marginal electorates from tax relief. The irony is that the targeting strength of Labor's tax credit proposal narrowed the catchment in a very tight way.

How does all this translate into the actual marginal seat outcomes?

The computer projections using the Census data and the election-night voting alignments, shows that Labor should have won Lindsay comfortably from Jackie Kelly and Ballarat from Michael Ronaldson. This is because these electorates contain the appropriate demographic mix that led to Labor wins in identical electorates. Labor did not gain these seats because either its campaign was ineffective, or the sitting member possessed a strong level of local following (or a combination of both).

But two seats was never enough for Kim Beazley to pull Labor over the magical 74 seat line. These gains would have taken Labor up 69 seats, counting Cheryl Kernot in Dickson.

Labor would require six additional seats to form Government. The next six most marginal seats that this demographic analysis points to as ought-to-be Labor gains are Hindmarsh (in South Australia), Herbert, Hinkler, Longman, Petrie and Moreton. These last five seats are all in Queensland.

Notwithstanding any impediments given rise to by Labor's short-fall in its tax package targeting, Government was in its grasp had it gained the seats objectively projected by the computer-aided demographic analysis discussed in this article.

The late postal votes counted in Dickson, have favoured Labor's Cheryl Kernot, providing a narrow win, as accurately predicted by the computer analysis.

Why, you may well ask, would postal voters holidaying overseas, vote more strongly Labor than those who stayed behind to see Labor's Queensland campaign? Perhaps the Liberals' failure to distribute how to vote cards promptly to these voters about to depart for (overseas) holidays is the answer.

Then again, if a few million more Queenslanders had been overseas and missed Labor's tax package campaign, perhaps Kim Beazley would be Prime Minister today.

But the lessons are not apparent to political parties. Pollsters continue to produce mean swing figures for the national vote, which appear to be aimed more at satisfying the commercial marketplace that they can accurately predict a comparatively useless national swing figure, rather than produce a meaningful estimate of the range of swings in key seats, and hence the actual outcome in the seats.

This latter factor requires demographic analysis and is what determines which party forms a Government.

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